

**Thorswood Nature Reserve,
North Staffordshire:
archaeological desk-based
assessment and survey 2003**

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Contents

	Page
Summary	1
1.0 Introduction	1
2.0 Location of study area	2
3.0 Objectives	2
4.0 Methodology	2
5.0 Geology and topography	3
6.0 Archaeological and historical background	3
7.0 Cartographic evidence	6
8.0 Gazetteer of sites	8
9.0 Conclusions and recommendations	25
10.0 Acknowledgements	26
11.0 References	26
 APPENDIX 1: 1847 Tithe Map field names	 28
 Figures	
1 Location Map	
2 Location of study area and SMR sites	
3 Diagrammatical section of Thorswood mine (based on an illustration in the Niness Collection of mining plans, DRO 934)	
4 Yates 1775 Map of Staffordshire	
5 1805 Plan of the Lordship or Liberty of Stanton	
6 1847 Tithe Map	
7 1881 1 st Edition Ordnance Survey map	
8 Location of archaeological sites listed in gazetteer	
 Plates	
1 Site No.1 looking south-west	
2 Site No.1 looking west	
3 Site No.2 looking west	
4 Site No.3 looking west	
5 Site No.4	
6 Site No.4 looking north	
7 Site No.5 looking south	
8 Site No.6 looking east	
9 Site No.6 looking south	
10 Site No.7 looking east	
11 Site No.7 looking north	
12 Site No.8 looking east	
13 Site No.8 looking south-west	
14 Site No.9 looking east	
15 Site No.10 looking east	
16 Site No.11 looking east	
17 Site No.12 looking east	
18 Site No.12 looking east	
19 Site No.13 looking south-east	

20	Site No.14 and Site No.15 looking east
21	Site No.17 looking north-east
22	Site No.18 looking east
23	Site No.19 looking south-east
24	Close up of mine shaft, Site No.19
25	Site No.20 looking north-east
26	Site No.21 looking west
27	Site No.22 looking north
28	Site No.23 looking east
29	Site No.24 looking east-south-east
30	Site No.26 looking east
31	Mineshaft cover and water tank, Site No.26
32	Site No.27 looking south
33	Site No.28 looking west
34	Site No.29 looking north-east
35	Site No.30 looking north
36	Site No.31 looking south
37	Site No.33 looking south
38	Site No.35 looking south-east
39	Site No.36 looking south
40	Site No.37 looking south
41	Site No.38 looking north-west
42	Site No.39 looking north-west
43	Site No.40 looking south (photo M. Salt)
44	Site No.41 looking north (photo M. Salt)
45	Site No.42 looking north (photo M. Salt)
46	Site No.43 looking south-west (photo M. Salt)

Thorswood Nature Reserve, North Staffordshire: archaeological desk-based assessment and survey 2003

Summary

An archaeological desk-based assessment and survey were carried out by Birmingham Archaeology at the Thorswood Nature Reserve, near Stanton, North Staffordshire (centred on NGR SK 1140 4700). The assessment and survey were carried out to provide archaeological information about the study area prior to its utilisation as an educational resource. The work was carried out during September 2003 on behalf of the Staffordshire Wildlife Trust. The assessment examined the available documentary and cartographic evidence, whilst the walkover survey was conducted in order to identify any features of potential archaeological or historical significance.

Forty-three potential archaeological sites were identified by the walkover survey, several of which have already been documented. Three Bronze Age bowl barrows are present within the study area and these are Scheduled Ancient Monuments (SAM Nos. 1358, SAM No. 13581 and 13582). A Late Bronze Age gold bracelet has been recovered from the study area and a prehistoric worked flint scatter has also been recorded within the study area. This suggests that there is considerable potential for the presence of below-ground archaeological features of prehistoric date within the study area. A number of mound earthworks were also recorded, some of which were at one time thought to be possible barrows. It now seems probable that these features are associated with post-medieval mining activity.

The survey identified twenty-nine post-medieval mining features (mainly mine shafts, shaft mounds and spoil heaps). The documentary sources indicate that the mines at Thorswood were in operation from the late 17th century through to 1860, and that they were mined for copper, lead, zinc and other minerals. They were at their most productive just before the mid-18th century and were probably not very profitable after this date. The mines were periodically abandoned at times before being reopened and reworked.

1.0: Introduction

This archaeological desk-based assessment and survey was undertaken by Birmingham Archaeology on behalf of the Staffordshire Wildlife Trust (SWT) during September 2003. The work was carried out in order to provide information about the historic environment of the Thorswood Nature Reserve, North Staffordshire (centred on NGR SK 1140 4700, hereafter referred to as 'the study area') ahead of the development of the site as an educational resource. The assessment and survey were carried out in accordance with a brief prepared by Staffordshire County Council (SCC 2003) and were conducted in accordance with the *Standard and Guidance for Archaeological Desk-Based Assessments* published by the Institute of Field Archaeologists.

2.0: Location of study area (Figs. 1 and 2)

The study area, is located at the southern end of the Pennines at the edge of the Peak District. It is on the eastern side of the Weaver Hills, approximately one kilometre to the north-west of the village of Stanton, which is situated five kilometres to the west of the town of Ashbourne. The study area is bounded on its north-eastern side by a minor road leading from Stanton to the A52, on its south-eastern side by Thorswood Lane, and by open fields to the south and west. The study area occupies an area of approximately half a square kilometre.

3.0: Objectives

The objectives of this assessment were to collate, verify and assess all information relevant to the presence, survival and character of historic environment remains within the study area. This was to provide sufficient information to enable the appropriate management of the historic environment resource, and to inform an educational strategy for the study area.

4.0: Methodology

The assessment consisted of desk-based research followed by a walkover survey of the study area.

The following sources were consulted during the desk based assessment:

- Records held by the Staffordshire Sites and Monuments Record (SMR);
- Historic Maps held by the Staffordshire County Record Office;
- Published and unpublished secondary sources held by the William Salt Library, Stafford, the Staffordshire County Record Office and the University of Birmingham Library;
- All sources referred to on the county SMR for the sites within study area;
- Aerial photographs held at the Staffordshire County Record Office and Staffordshire SMR.

During the walkover survey a record 'as existing' was made of all archaeological sites identified within the study area. This included a plot of the location of each site and a description, including approximate dimensions. A record was also made of the topography, and the nature of current land use, within the study area.

5.0: Geology and topography

There is a substantial outcropping of Milldale Limestone, a medium to dark well-bedded limestone, in the western half of the study area. In the south-east there is an outcropping of the Widmerpool Formation, which consists of Mixon Limestone Shales with Onecote Sandstones - mudstone with limestone, and less common sandstone turbidites. There is a narrow outcropping of Cheddleton Sandstone in the north-eastern part of the study area, which is overlain in some areas by boulder clay (Geological Survey of Great Britain, Sheet 124).

The Tinsell Brook, a minor tributary that feeds into the River Dove, runs north-south across the middle of the study area. To the west of the Tinsell Brook the ground rises quite steeply towards the summit of a hill where there is a small area of woodland known as Thorswood Plantation. The area to the north and west of the plantation consists of moorland, rough pasture and areas of gorse. There is a further area of woodland in the centre of the study area, called Nan's Wood. The land in the valley on either side of the Tinsell Brook consists of grassland, which is used for pastoral farming.

6.0: Archaeological and historical background

The information in this section is based on documentary evidence, and data from the Staffordshire Sites and Monuments Record. In order to provide a wider archaeological context an area encompassing approximately one kilometre radius around the study area was included within the SMR search. The location of the SMR sites that are referred to in the text is shown on Figure 2.

Prehistoric

A number of prehistoric flintworking sites have been identified in the Thorswood area, although none of these sites have been dated to a particular prehistoric period. There is a single flint scatter within the study area (SMR No.03766), located towards the southern boundary of the study area, as well as several findspots of humanly worked flint within a kilometre of the study area (SMR Nos.01210, 03510, 03512, 03513, 04974, 05128, 05131 and 05132).

Clusters of prehistoric pottery, and a damaged stone axe blade (SMR No. 05130), have been found about 750m to the west of the study area. The presence of pottery suggests the possibility of a prehistoric settlement site in this location.

There is a standing stone featuring cup-marks (SMR No.05500), which probably dates to the Late Neolithic/ Early Bronze Age, located just under a kilometre to the south-west of the study area.

Three Bronze Age bowl barrows, which are Scheduled Ancient Monuments are situated within the study area. Two are located to the north of Thorswood Plantation (SMR Nos.

00466/ 00468, SAM Nos. 13583/ 13582), and another is situated immediately to the west of the plantation (SMR No. 00467, SAM No. 13581). Limited antiquarian excavation of the latter site produced a human tooth and one or two fragments of bone, whilst excavation at one of the barrows to the north of the plantation (SMR No. 00466) located a cist, which contained a cremation, flints, pottery sherds and burnt bone.

There are also a number of scheduled barrow sites in the immediate vicinity of the study area. The Ober Low barrow is 500m to the south (SMR No.00073), the Scrip Low barrow is just under a kilometre to the south-east (SMR No.00072). There are two barrows in the vicinity of Weaver Farm (SMR Nos.00074 and 00160), which are situated about 500m to the west and 1.2 kilometre to the south-west of the study area.

A Late Bronze Age gold bracelet (SMR No.01207) with flat strip decoration and two button terminals was found at the southern edge of the study area, adjacent to Nibs End Farm. A gold torc (SMR No.01826) dating from the Middle Bronze Age to the Early Iron Age was found about 300m to the east of the study area, near Common Farm. A gold chain with two bells attached (SMR No.01828), thought to be of Bronze Age date has been discovered just to the north-east of gold torc findspot.

Romano-British

There are no known Romano-British sites within the study area, and none have been documented within its immediate environs.

Saxon and Medieval

There are no known Saxon or Medieval sites within the study area, but there is recorded evidence for possible Medieval open field system farming, in the form of ridge and furrow earthworks (SMR No.20237) and strip lynchets (SMR No.01973), about a kilometre to the south-west.

Post-medieval

Evidence for post-medieval mining activity in the western part of the study area is plentiful. The SMR records the presence of a mine consisting of a “group of bell-pits” located within and around Thorswood Plantation (SMR No.20229). There are a number of mounds that may be spoil heaps associated with the mining activities in this area (SMR Nos.00139 – 00142, and SMR No.01567). Some of these mounds were originally thought to be possible Bronze Age barrows, but this explanation now seems unlikely. Three former lime kilns are situated to the west and north-west of the study area (SMR Nos.01875, 01876 and 01971). There are also copper and lead mines sites at Ribden, further to the west, on the western side of the Weaver Hills.

The mines at Thorswood and Ribden were the subject of an article published in the Bulletin of the Peak District Mines Historical Society (Robey and Porter, 1971). This work was subsequently incorporated into a publication about the copper and lead mines

in North Staffordshire (Porter and Robey, 2000). What follows is a summary of the material relevant to Thorswood from both publications.

According to the authors, Ribden was the most important of the two mines, but Thorswood was also significant. Copper, lead, zinc and other minerals were worked at the mines, which were operated with varying degrees of success from the 1680's up until their abandonment in 1862. Most of the available information concerns the leasing of the mines, the mineral rights to which were held by the Earl of Shrewsbury. Some of the leases contain information concerning the nature of the mining activity at the sites.

The first reference to the mines in the Ribden area comes from Dr Robert Plot in 1686, where he states that lead ore was being mined in the area, and that none of the mine workings were particularly considerable. In 1692 the Earl of Shrewsbury leased the mines at Thorswood and Ribden to five persons who were already working them. The lease was restricted to lead ore. In 1718 the Thorswood mine was leased, along with Ribden, by Anthony Hill of Pepperhill, Shropshire, Joshua Hayward of Matlock and Samuel Seale of Horninglow, Burton. Samuel Seal subsequently sold his share to Thomas Gilbert. The lease included the rights to;

“search Digg and Delve...and also to Sink Shafts build Coes and make Soughs...to fetch and carry water to Budle and wash the sd. Copper and Lead oare there or to carry the sd. Oare to the water to bee washed and to carry wood and Timber to the sd. mines and to carry away the sd. oare”.

The term “Coes” refers to mine buildings usually situated next to, or surrounding a shaft, whilst a ‘Sough’ is a drainage level within a mine.

The Thorswood mine was sublet to a group of 12 miners in 1729. Hill and Gilbert were granted a new lease in 1733. There is little detail about the nature or success of the mining operations during this early period.

The mines appear to have been quite successful from 1739-1741. Large quantities of lead and copper were said, by their owners, to have been produced. The Thorswood mine had made “Several Thousand pounds neat profit”. Unfortunately, the productive seam was lost through negligence a few years after this. The mine was only intermittently worked for the next few years.

A new venture was started in the mid-1750's by which time the sons of Thomas Gilbert owned the Thorswood Mines. The owners attempted to ‘sell’ shares in the mines, enthusing about their potential. According to the owners, the mines were producing lead and copper that was as good as any in England, labour was cheap, and there were no problems with flooding. They wanted to rework some of the mines and carry out trials at others. According to Porter and Robey “the engine shafts were all open with engines fixed on several of them”. They suggest that the engines described would have been horse gins, which were horse-powered winding apparatus used to draw ore up the shaft. In the glossary to the book the operation of a gin is described “....The horse walked on a circular track set outside the shaft collar. A massive pivoted wooden column in the centre of the horse track supported a horizontal drum, around the circumference of which was

wound the winding rope. The rope passed over one or two pulley wheels set in a frame at the shaft head. Attached to the rope was a kibble.” A kibble was a container used to haul the ore to the surface of a shaft.

There are further references to Thorswood being worked in the 1760’s and 1770’s. In 1793 the Earl of Shrewsbury granted all mines of copper, lead and calamine at Thorswood to Rupert Leigh and William Ingleby, who were both partners in the Cheadle Brass and Wire Company. Four years later the Cheadle company were enquiring about the state and future potential of the mines at Thorswood, and stipulating that if conditions were not favourable then the mines should be given up. This appears to have happened eventually as a quarter of a century appear to have passed before the mines were reworked.

The Earl leased the mines to a new company in 1825. The new prospectors pursued “the Great Thorswood level...to a distance of 110 fathoms (201m) from the mouth of the shaft”. Porter and Robey suggest that this was probably the 53 fathom level (97m) from Gilbert’s shaft at Thorswood mine. There is a report that includes a section through the Thorswood mine (Fig. 3). The level had cut a number of veins “which exhibited great reasons of being the ancient lode sought for”. However, this proved not to be the case. There were problems with flooding, and the company did not discover any significant fresh ore deposits. The company stopped working at Thorswood towards the end of the 1820’s. The mines then lay redundant for a while.

During the mid-19th century Earl of Shrewsbury commissioned a report, addressed towards outlining the prospects of the mines in the region. The shafts at Thorswood were recorded as inaccessible, as they were very deep and there was no machinery on them. Porter and Robey state that the “The old company had made extensive trials in the old workings but without success.” Despite this, the compiler of the report thought that there was a chance of further discoveries, but not enough potential to justify the use of expensive machinery or to excavate expensive drainage levels.

The mine at Thorswood was taken over by the Oakamoor and Stanton Mining Company Ltd for a short period from 1859-60. The only work that was carried out before the company folded consisted of exploring shafts and removing debris. The Ribden mines were also reopened around the same time, and they closed down in 1862.

Porter and Robey also give a brief description of two of the shafts at the Thorswood site. One of the shafts is suggested to be around 90m deep, with another shaft running off it, which is thought to have been approximately 3m wide.

7.0: Cartographic evidence

On the Yates 1775 map of the county of Staffordshire (Fig. 4) the study area is bounded on its northern side by Stanton Moor, which also extends a little way into the north-western and south-eastern parts of the study area. Five lead mine sites are depicted in the

area now known as Thorswood Plantation. A building is shown on the map in the area of what is now Nibs End Farm, at the southern end of the study area. Interestingly, the building is referred to as 'Thornwood', rather than 'Thorswood', which suggests that the name Thorswood may be an adaptation, and that it may not have any historical significance.

On the 1805 plan of the Lordship or Liberty of Stanton (Fig.5) the building in the area of Nibs End Farm is called 'Thorswood'. The fields in the north-western part of the study area are referred to as "Thorswood Closes", and the area just to the north is called "Thorfroood Nook". There is very little difference between the depiction of the study area on the 1805 map and that of the Tithe Map of 1847 (Fig. 6). On the two maps the study area consists of a system of rectilinear fields surrounding a core of irregular-shaped enclosures, not much different to the present layout of fields.

On the Tithe Map a building is depicted on the eastern side of the study area (see Site No.38, below), to the north-west of the current location of Thorswood House. The building is probably a barn, as the fields next to it are called "Barn Piece and Plantation" and "Field above Barn". There is also a house and garden depicted on the Tithe Map, located just outside the north-western edge of the study area. Thorswood Plantation and Nan's Wood are depicted on the map, but they are not referred to by name. The fields around what is now Nibs End Farm are referred to as "Thorswood Meadow", and "Thorswood House Piece". There is an irregular-shaped field immediately to the north of Thorswood Plantation which is called "Lime Kiln Piece", indicating that limestone was being quarried to burn in a kiln to obtain lime for improvement of the land and for mortar for building materials. This would have required large amounts of timber as fuel, obtained from managed coppiced woodland, presumably from the adjacent Thorswood Plantation.

There are two fields in the north-eastern part of the study area that are referred to as "Black Ground". This could suggest the presence of coal measures towards the ground surface or peat deposits, although the geology map records this area as an outcropping of Cheddleton Sandstone, overlain by boulder clay.

There are two fields to the south of Thorswood Plantation called "Little Gin Piece" and "Gin Piece". 'Gin' is a Derbyshire term, not often used in Staffordshire, for a horse-operated winding apparatus used to haul a container holding ore to the surface of a mine shaft (Porter and Robey 2000, 256, 260).

Apart from a few areas of woodland, and one enclosure devoted to arable cultivation, the majority of the study area appears to be devoted to pastoral farming at the time of the 1847 Tithe Map.

The arrangement of fields is very little changed by the date of the publication of the 1st Edition OS map, in 1881 (Fig. 7). Several old mine shafts are depicted in the area, in and around Thorswood Plantation, and an old quarry is shown immediately to the east of the wood. An old quarry is also shown in a field to the north-east of Thorswood plantation,

perhaps associated with limestone quarrying for a lime kiln which may have been situated close by and is suggested by the name "Lime Kiln Piece" on the 1847 Tithe map.

A small pond (see Site No.29, below) is shown in the south-eastern corner of the field, immediately to the south of Thorswood House, which is depicted for the first time.

There are no significant changes within the study area depicted on the 2nd and 3rd editions of the OS series, which date to 1900 and 1922, respectively. The depiction of the study area on OS maps up to the present day remains virtually unchanged.

8.0: Gazetteer of sites (Fig. 8)

The gazetteer is a list of all of the potential archaeological sites identified during the walkover survey. Site Nos. 1-28 and 40-43 are located in Area 1, which encompasses the higher ground on the western side of the study area. The remainder of the sites are listed according to the field in which they are located. The fields are numbered from 1-13. The grid references of the locations of the sites given below are approximate and were obtained by plotting the position of each site in relation to field boundaries and other features depicted on Ordnance Survey maps. Sites 40-43 were identified after the completion of the walkover survey by Mike Salt of the Derbyshire Caving Association. These sites are listed at the end of the Area 1 section.

Area 1

Site No.1 (Plates 1 and 2)

Period: Post-medieval

Feature Type: Spoil heap/mine shaft cover

SMR No. None

Approx. Grid Reference: SK 1111 4726

Large oval-shaped mound measuring approximately 35m (E-W) x 28m (N-S), with an estimated height of between three and four metres. The surface of the mound, which is very irregular, has a small mound on it close to its eastern edge. This feature is 4.30m in diameter and approximately 1.0m high. Near the northern edge of the large mound there is a small rectangular structure made of limestone blocks which measures 3.40m x 3.75m, and is 1.05m high. This feature is a water tank used to supply water to the local farmer's cattle (Pers. Comm. Mike Salt, Derbyshire Caving Association).

Site No.2 (Plate 3)

Period: Post-medieval

Feature Type: Mine shafts and spoil heaps

SMR No. None

Approx. Grid Reference: centred on: SK 1110 4731

Large area, situated approximately 100m to the north-west of Thorswood Plantation, containing a concentration of mine shafts and spoil heaps.

Site No.3 (Plate 4)

Period: Bronze Age

Feature Type: Bowl barrow

SMR No. 00466/ Scheduled Ancient Monument No. 13583

Approx. Grid Reference: SK 1121 4725

Oval mound, located 140m to the north of Thorswood Plantation, measuring 14m x 12m, with a maximum height of 1.10m. The mound has a shallow central depression in it which is 0.20m deep and 3.0m in diameter. There are slight traces of a possible ditch on the south, south-west and south-east sides. Limited excavation at the centre of the mound in the mid-19th century located a cist, which contained a cremation, flints, pottery sherds and burnt bone (Bateman 1861). There is a roughly rectangular area of possible quarrying, measuring 11m (E-W) x 6m (N-S), with a maximum depth 1.0m, on the northern side of the barrow.

Site No.4 (Plates 5 and 6)

Period: Post-medieval

Feature Type: Mine shaft and spoil heaps

SMR No. 20229

Approx. Grid Reference: SK 1116 4717

One, or possibly two, overgrown/collapsed mine shafts, one of which has been sealed with concrete capping, situated a few metres to the north of Thorswood Plantation. There are a number of small spoil heaps in the immediate vicinity of the shaft(s), which measure up to 1.0m in height, and 2.0- 4.0m in diameter.

Site No.5 (Plate 7)

Period: Post-medieval

Feature Type: Spoil heaps

SMR No. None

Approx. Grid Reference: SK 1108 4708

A few small spoil heaps situated 50m to the west of Thorswood Plantation, and immediately to the south of a Bronze Age barrow, which is a Scheduled Ancient Monument (Site No. 27/ SMR No.467).

Site No.6 (Plates 8 and 9)

Period: Post-medieval

Feature Type: Mound/ mine shaft

SMR No. None

Approx. Grid Reference: SK 1113 4707

Large mound, situated on the western edge of Thorswood Plantation, which is 22m in diameter and has a maximum height of approximately 2.50m. The mound does not appear to have an accompanying ditch, although there are a few shallow depressions located around its sides. The surface of the mound is uneven, and there is a large mature tree towards its centre. A shaft with a circular concrete capping, which is 2.0m in diameter, is located towards the western edge of the mound. There is a spoil heap associated with the shaft situated on the south-west side of the mound.

Site No.7 (Plates 10 and 11)

Period: Post-medieval

Feature Type: Mound/mine shaft

SMR No. 01567

Approx. Grid Reference: SK 1118 4709

Large mound, situated on the eastern edge of Thorswood Plantation (probably SMR No. 01567). The feature has a diameter of around 20m, and a maximum height of approximately 2.0m. Its surface is flat, and it has a sub-circular depression associated with a shaft dug into its western side, which has been capped with a circular block of

concrete, 2.0m in diameter. There is also spoil heap against the western side of the mound.

Site No.8 (Plates 12 and 13)

Period: Post-medieval

Feature Type: Spoil heap/ shaft

SMR No. 20229

Approx. Grid Reference: SK 1113 4714

Large oval-shaped mound, located on the north-western edge of Thorswood Plantation, measuring 35m (N-S) x 40m (E-W), with a maximum height of approximately 4.0m. The top of the mound is fairly flat, and there is a square-shaped depression associated with a shaft located just to the north-west of the centre. The depression measures 3.0m x 3.0m and has an approximate depth of 2.0m. The shaft is probably collapsed. The flat area on the top of the mound may have been a gin circle (Pers. Comm. Mike Salt, Derbyshire Caving Association).

Site No.9 (Plate 14)

Period: Post-medieval

Feature Type: Mine shaft

SMR No. 20229

Approx. Grid Reference: SK 1117 4714

Mine shaft located at the northern edge of Thorswood plantation. The feature, which consists of a circular-shaped depression within a shallow mounded area, has an overall diameter of approximately 5.5m.

Site No.10 (Plate 15)

Period: Post-medieval

Feature Type: Depression/possibly associated with mining activity

SMR No. 20229

Approx. Grid Reference: SK 1120 4711

Irregular roughly oval-shaped depression measuring 12m (E-W) x 6m (N-S) located at the north-east edge of Thorswood Plantation. This feature is unlikely to be a mine shaft,

but may have some connection with mining activity (Pers. Comm. Mike Salt, Derbyshire Caving Association).

Site No.11 (Plate 16)

Period: Post-medieval

Feature Type: Mine shaft

SMR No. 20229

Approx. Grid Reference: SK 1116 4704

Mine shaft located on the eastern edge of Thorswood Plantation. The feature, which consists of a circular-shaped depression within a shallow mounded area, has an overall diameter of approximately 9.0m.

Site No.12 (Plates 17 and 18)

Period: Post-medieval

Feature Type: Mound/ mine shaft

SMR Nos. 00140/ 20229

Approx. Grid Reference: SK 1113 4700

Mound situated on the edge of a ridge towards the north-east end of Thorswood Plantation. The site location corresponds closely to the OS coordinates for the possible barrow recorded as SMR No.00140. The monument is 20m in diameter , and is approximately 1.0m high on its western side, with an estimated maximum height of 4.0m on its eastern side, where it is built into the natural slope of the side of the hill. The mound does not appear to have an accompanying ditch, although there are a few shallow depressions located around its sides. The top of the mound is fairly flat, and there is a circular depression associated with a mineshaft located on its western side. The shaft has been capped with a circular disc of concrete, which measures 2.0m in diameter. The SMR entry records the site as a possible mutilated barrow but it could be a spoil heap directly associated with the mine shaft.

Site No.13 (Plate 19)

Period: Post-medieval

Feature Type: Mound/ mine shaft

SMR Nos. 00142/ 20229

Approx. Grid Reference: SK 1104 4694

Mound situated on the south-west edge of Thorswood Plantation. The site location corresponds closely to the OS coordinates for SMR entry No.00142. The monument measures 18m (N-S) x 17m (E-W), and is approximately 1.5m high on its northern side, with an estimated maximum height of 4.0m on its southern side where it is built into the natural slope of the side of the hill. The mound does not appear to have an accompanying ditch. There is a large circular-shaped depression, 7.0m in diameter, associated with a mine shaft towards the centre of the mound. The site may be a mutilated barrow but is more likely to be a spoil heap associated with the mine shaft at its centre.

Site No.14 (Plate 20 - in foreground)

Period: Post-medieval

Feature Type: Mine shaft

SMR Nos. 20229?

Approx. Grid Reference: SK 1104 4693

Mine shaft located on the southern edge of Thorswood Plantation. The feature, which consists of a circular depression within a mounded area, has an overall diameter of approximately 12.0m.

Site No.15 (Plate 20 – in background)

Period: Post-medieval

Feature Type: Mine shaft

SMR Nos. 20229?

Approx. Grid Reference: SK 1104 4692

Mine shaft located just to the south of Thorswood Plantation. The feature, which consists of a circular depression within a mounded area, has an overall diameter of approximately 6.0m.

Site No.16 (No plate)

Period: Post-medieval

Feature Type: Mine shaft?

SMR Nos. 20229?

Approx. Grid Reference: SK 1105 4692

Possible mine shaft located just to the south of Thorswood Plantation. The feature, which consists of a circular depression within a mounded area, has an overall diameter of approximately 10.0m.

Site No.17 (Plate 21)

Period: Post-medieval

Feature Type: Depression/possibly associated with mining activity

SMR Nos. 20229?

Approx. Grid Reference: SK 1106 4690

A roughly square-shaped depression cut into limestone, which measures approximately 3.0m x 3.0m, located about 40m to the south of Thorswood Plantation. This feature may be related to mining activity, or could be a small quarry pit (Pers. Comm. Mike Salt, Derbyshire Caving Association).

Site No.18 (Plate 22)

Period: Post-medieval

Feature Type: Mine shaft

SMR Nos. 20229?

Approx. Grid Reference: SK 1111 4689

Mine shaft situated roughly 20m to the south of Thorswood Plantation. The feature, which consists of a circular depression with a shallow mound on its eastern side, has an overall diameter of approximately 13.0m.

Site No.19 (Plates 23 and 24)

Period: Post-medieval

Feature Type: Mound/ mine shaft

SMR Nos. 20229?

Approx. Grid Reference: SK 1112 4686

Large oval mound situated roughly 50m to the south-east of Thorswood Plantation. The mound measures approximately 17m (N-S) x 25m (E-W), and is approximately 1.0m high on its western side, with an estimated maximum height of 2.0m on its southern side where it has been built into the natural slope of the side of the hill. The surface of the mound is flat but slightly uneven, possibly indicating the former presence of a gin circle (Pers. Comm. Mike Salt, Derbyshire Caving Association), and there is a depression associated with a mine shaft located on its western side. The shaft has been capped with a circular disc of concrete, which measures 2.0m in diameter. The north-east and south sides of the mound are irregular. This appears to be the result of excavation into the sides of the mound.

Site No.20 (Plate 25)

Period: Post-medieval

Feature Type: Mine shaft

SMR Nos. 20229?

Approx. Grid Reference: SK 1112 4691

Possible mine shaft located on the south-eastern edge of Thorswood Plantation. The feature consists of a small roughly circular depression cut into limestone with a diameter of approximately 2.0m.

Site No.21 (Plate 26)

Period: Post-medieval

Feature Type: Mine shaft

SMR Nos. 20229?

Approx. Grid Reference: SK 1107 4694

Mine shaft located on the south-west edge of Thorswood Plantation. The feature, which consists of a circular depression within a slightly mounded area, has an overall diameter of approximately 6.0m.

Site No.22 (Plate 27)

Period: Post-medieval

Feature Type: Mineshaft and spoil heap

SMR Nos. 20229?

Approx. Grid Reference: SK 1111 4694

Mine shaft and spoil heap located on the south edge of Thorswood Plantation. The site consists of a circular depression 6.0m in diameter with a roughly circular mounded area, approximately 15m in diameter on its east side.

Site No.23 (Plate 28)

Period: Post-medieval

Feature Type: Mound/ mine shaft

SMR Nos. 20229?

Approx. Grid Reference: SK 1118 4695

Mound situated on the edge of a ridge on the south-east edge of Thorswood Plantation. This oval feature is roughly 13m (N-S) x 22m (E-W), and is approximately 2.0m high on its western side, with an estimated maximum height of around 3.0m on its eastern side where it is built into the natural slope of the side of the hill. The sides of the monument are irregular, and it does not appear to have an accompanying ditch. The surface of the mound is fairly flat, and there is a circular-shaped depression, approximately 5m in diameter, associated with a mineshaft, located on its western side.

Site No.24 (Plate 29)

Period: Post-medieval

Feature Type: Spoil heaps/ mine shaft

SMR Nos. 00141/20229?

Approx. Grid Reference: SK 1118 4695

Mound situated on the edge of a ridge on the southern edge of Thorswood Plantation. The site consists of a roughly oval area of raised ground, which measures approximately 12m (N-S) x 30m (E-W). The surface of the mound is very irregular being made up of a series of smaller mounds (probably spoil heaps) with a height of between 1.0m and 1.5m. There is a circular depression associated with a mine shaft, which measures approximately 9m in diameter, located on the north-west side of the mound.

Site No.25 (No Plate)

Period: Post-medieval

Feature Type: Mine shaft

SMR No. None

Approx. Grid Reference: SK 1114 4679

Mine shaft located in a small wooded area 140m to the south of Thorswood Plantation. It was not possible to obtain the dimensions of this site due to its being overgrown/obscured by bushes and trees. The shaft, which has been filled with refuse, appears to be partially collapsed. It measures approximately 4.0m x 3.0m and has a depth of c.2.0m (Pers. Comm. Mike Salt, Derbyshire Caving Association).

Site No.26 (Plates 30 and 31)

Period: Post-medieval

Feature Type: Mound/ mine shaft

SMR Nos. 00139/ 20229?

Approx. Grid Reference: SK 1129 4704

Large oval mound situated on gradually sloping ground 100m to the east of Thorswood Plantation. The mound measures approximately 18m (N-S) x 25m (E-W), and is approximately 2.0m high on its western side, with an estimated maximum height of 4.0m on its southern side where it has been built into the natural slope of the valley. The surface of the monument is uneven. There is a water tank on its western side, which has been placed on top of a concrete cover for a mine shaft. This shaft is thought to be a hauling shaft approximately 100m deep (Pers. Comm. Mike Salt, Derbyshire Caving Association). There is also a rectangular concrete disk immediately adjacent to the western edge of the mound, which measures 1.80m x 2.05m. This feature may have been associated with winding gear (Pers. Comm. Mike Salt, Derbyshire Caving Association). There is a flat area on the western side of the mound that may have been a gin circle. There are signs of shallow excavation around the sides of the mound, but there are no indications of an accompanying ditch.

The mound is probably not a barrow and is more likely to be a spoil heap associated with the adjacent mine shaft. The position of the site equates roughly with the coordinates of SMR No. 00139, which is recorded in the SMR as “unlikely to be a barrow”.

There is a small depression approximately 8.0m to the north-west of the water tank referred to above. This feature may be a collapsed climbing shaft (Pers. Comm. Mike Salt, Derbyshire Caving Association).

Site No.27 (Plate 32)

Period: Bronze Age

Feature Type: Bowl barrow

SMR No. 00467/ Scheduled Ancient Monument No. 13581

Approx. Grid Reference: SK 1108 4710

Bowl barrow located on the summit of hill 50m to the west of Thorswood Plantation. The barrow is oval-shaped and measures 27m x 23m with a maximum height of approximately 2m. The southern edge of the mound has been removed by quarrying, and there are a number of small spoil heaps immediately to the south of the monument (Site No.5). There are also possible quarry pits around the edges of the mound, but no traces of an accompanying ditch. There is a sub-rectangular pit measuring approximately 6m x 5m, with a depth of roughly 1m, in the centre of the mound. This feature may be associated with the limited excavation of the mound carried out in the mid-19th century, which produced a human tooth and one or two fragments of bone (Bateman 1861).

Site No.28 (Plate 33)

Period: Bronze Age

Feature Type: Possible bowl barrow

SMR No. 00468/ Scheduled Ancient Monument No. 13582

Approx. Grid Reference: SK 1110 4721

Possible bowl barrow located on the crest of a ridge 50m to the north-west of Thorswood Plantation. The earthwork is oval and measures 11.5m x 9.5m with a height of approximately 0.7m. There is a shallow circular hollow, 2.0m in diameter and 0.1m deep, in the centre of the mound. There are no visible traces of an accompanying ditch. No burials or artefacts have been found at the site, but the discovery of charcoal and flint flakes is referred to by Bateman (1861).

Additional Sites

The following potential archaeological sites were identified by Mike Salt of the Derbyshire Caving Association.

Site 40 (Plate 43)

Period: Post-medieval

Feature Type: Depression/possibly associated with mining activity

SMR No. None

Approx. Grid Reference: SK 1118 4721

Irregular shaped depression located to the north of Thorswood Plantation between Site Nos 3 and 4.

Site 41 (Plate 44)

Period: Post-medieval

Feature Type: Depression/possibly associated with mining activity

SMR No. 20229

Approx. Grid Reference: SK 1118 4712

Irregular shaped depression located on the northern edge of Thorswood Plantation between Site Nos 9 and 10.

Site 42 (Plate 45)

Period: Post-medieval

Feature Type: Depression/possibly associated with mining activity

SMR No. None

Approx. Grid Reference: SK 1106 4716

Depression located on the summit of the hill to the west of Thorswood Plantation.

Site 43 (Plate 46)

Period: Post-medieval

Feature Type: Depression/possibly associated with mining activity

SMR No. None

Approx. Grid Reference: SK 1103 4704

Depression located to the west of Thorswood Plantation between Site Nos. 5 and 13.

Field 1

Site No.29 (Plate 34)

Period: Pre-1881

Feature Type: Former Pond

SMR No. None

Approx. Grid Reference: SK 1184 4697

Semi-circular depression situated at the north-east corner of Field 1, which measures 18m (E-W) x 8m (N-S), and is approximately 0.75m deep. A pond is depicted at this location on the 1st Edition OS map of 1881.

There are meandering linear depressions in the north-east and south-east parts of the field, which may be the remains of former watercourses. These features are visible on a vertical aerial photograph taken in the winter of 1981, which is held at the Staffordshire SMR (Ref No.54 81 097).

Field 2

No potential archaeological features were identified in this field.

There are meandering linear depressions, which may be the remains of former watercourses, that surround 'islands' of raised ground, in most areas of the field. These features are visible on a vertical aerial photograph taken in the winter of 1981 (held at the Staffordshire SMR/Ref No.54 81 097).

Field 3

Site No.30 (Plate 35)

Period: Pre-1805

Feature Type: Bank and ditch boundary

SMR No. None

Approx. Grid Reference: SK 1156 4699

The northern boundary of Field 3 consists of a bank (c.1.0m wide/c.0.5m high) and ditch (c.1.0m wide/c.0.5m high), and hedgerow. The boundary is shown on the 1805 map depicting the study area.

Site No.31 (Plate 36)

Period: Pre-1805

Feature Type: Bank and ditch boundary

SMR No. None

Approx. Grid Reference: SK 1165 4690

The eastern boundary of Field 3 consists of a bank (maximum width c.2.0m/maximum height c.0.75m) and ditch (maximum width c.4.0m/maximum depth c.1.0m), and a mature hedgerow with the occasional mature tree. The boundary is shown on the 1805 map depicting the study area.

Site No.32 (No Plate)

Period: Pre-1805

Feature Type: Boundary ditch

SMR No. None

Approx. Grid Reference: SK 1156 4678

The southern boundary of Field 3 consists of a ditch (c.2.0m wide/c.0.5m deep), and a mature hedgerow and dry stone wall. The boundary is shown on the 1805 map depicting the study area.

Field 4

Site No.33 (Plate 37)

Period: Pre-1805

Feature Type: Ditched Boundary

SMR No. None

Approx. Grid Reference: SK 1150 4670

The eastern boundary of Field 4 consists of a ditch (c.2.0m wide/c.0.5m deep) and a mature hedge with an occasional mature tree. The boundary is shown on the 1805 map depicting the study area.

Field 5

Site No.34 (No Plate)

Period: Pre-1805

Feature Type: Boundary bank

SMR No. None

Approx. Grid Reference: SK 1127 4695

The western boundary of Field 5 consists of a bank (1.0m wide/0.3m high) and mature hedgerow. The boundary is shown on the 1805 map depicting the study area.

Field 6

No potential archaeological features were identified in Field 6.

Field 7

Site No.35 (Plate 38)

Period: Unknown

Feature Type: Pond

SMR No. None

Approx. Grid Reference: SK 1122 4677

A roughly square fenced area, measuring approximately 20m x 20m, containing a pond surrounded by trees, located towards the centre of Field 7. There are no features depicted in this area on any of the historical maps that were consulted as part of the assessment.

Site No.36 (Plate 39)

Period: Pre-1805

Feature Type: Bank and ditch boundary

SMR No. None

Approx. Grid Reference: SK 1118 4682

The western boundary of Field 7 consists of a bank (c.3.0m wide/c.0.5m high) and ditch (c.1.0m wide/c.0.5m deep). The boundary is shown on the 1805 map depicting the study area.

Field 8

No potential archaeological features were identified in Field 8.

Field 9

No potential archaeological features were identified in Field 9.

Field 10

Site No.37 (Plate 40)

Period: Unknown

Feature Type: Building platform?

SMR No. None

Approx. Grid Reference: SK 1144 4721

A rectangular area of raised ground located in the western corner of Field 10, which measures approximately 12m (NE-SW) x 9m (NW-SE), and is approximately 1.5m high. The surface of the area is flat, and it has gently sloping sides. The feature may have been a platform for a small building, although there are no structures depicted in this area on any of the historical maps that were consulted as part of the assessment.

Site No.38 (Plate 41)

Period: Pre-1847

Feature Type: Building

SMR No. None

Approx. Grid Reference: SK 1153 4728

The remains of a rectangular structure located towards the northern corner of Field 10. The structure measures approximately 12m x 4m, and its limestone walls survive to a height of around 1.0m. There are no signs of any internal partitions, although these could be obscured, as the feature is overgrown with nettles. The building is depicted on the Tithe Map of 1847, but not on the 1805 map.

Site No.39 (Plate 42)

Period: Pre-1847

Feature Type: Bank and ditch boundary

SMR No. None

Approx. Grid Reference: SK 1153 4728

The remains of two short stretches of a bank and ditch boundary, running NW-SE, are located in the northern corner of Field 10. The bank measures approximately 3.0m wide and 0.75m high, and the accompanying ditch has a maximum width of approximately 2.0m. The two lengths of the former boundary lie on either side of the ruined building referred to above (Site No.38). The boundary is depicted on the Tithe Map of 1847, but not on the 1805 map. On the Tithe Map the boundary is divided into two lengths which curve towards the northern boundary of Field 10, suggesting that they represent the former entrance way to the building.

Field 11

No potential archaeological features were identified in Field 11.

Field 12

No potential archaeological features were identified in Field 12.

Field 13

No potential archaeological features were identified in Field 13.

9.0: Conclusions and recommendations

A total of 43 potential archaeological sites have been identified by the walkover survey and desk-based assessment. The majority of these are located in Area 1, within and around Thorswood Plantation. A total of 21 sites have also been identified within a kilometre radius of the study area.

There is a reasonable amount of evidence for prehistoric activity within and around the study area. The most important prehistoric sites are the three Bronze Age bowl barrows situated close to Thorswood Plantation, which are Scheduled Ancient Monuments. These monuments appear to have been damaged by 19th century antiquarian excavation and by later quarrying and mining activities within the study area. A Late Bronze Age gold bracelet has also been found within the study area and there is a prehistoric worked flint scatter recorded within the study area. There is considerable potential for the existence of further below ground prehistoric archaeological remains within the study area. Although identification of further archaeological remains would be difficult due to the large amount of disturbance by later mining and associated activities.

No sites dating from the Romano-British or Saxon periods were identified by the assessment.

The assessment has identified medieval agricultural features just to the south of the study area, but has not identified any definite medieval sites within it. There is, however, possible evidence for agricultural activity dating to earlier post-medieval period or earlier. The walkover survey has identified some of the field boundaries in the study area which consist of a bank and/or ditch, as well as mature hedgerows, including mature trees. Such features often indicate that a boundary is of some antiquity.

The majority of archaeological remains within the study area are associated with post-medieval mining activity. A total of 29 such sites were identified during the walkover survey. More than half of these sites consist of conical depressions associated with disused mine shafts, some of which have been capped with concrete. Ten of the mining sites consist of a shaft in association with a mound. In most cases the shaft appears to have been dug through the mound. Some of the mounds were previously thought to be bowl barrows, due to the presence of barrows nearby. The interpretation that is favoured currently is that the mounds are spoil heaps or a “shaft mounds” associated with the mine shafts themselves. Some of the mounds probably had a functional purpose. They may have acted as platforms for machinery used to haul containers filled with ore from the shafts. No evidence of such machinery was found during the assessment.

The documentary sources indicate that the mines were in operation from at least 1680 to 1862, and that they were mined for copper, lead, zinc and other minerals. They were probably at their most productive just before the mid-18th century. The sources indicate that the mines were probably never hugely profitable, and that there were often periods when they were closed down. This is typical of the nature of the lead mining industry in the area with mines being opened, closed down and reopened on a cyclical basis.

It is recommended that non-intrusive survey of selected parts of the study area should be considered. Geophysical survey may not be appropriate due the disturbance by spoil tips and general mining activity. It is suggested that it would be useful to carry out a measured survey of the three barrow sites and the mining features in Area 1. This would aid the interpretation, presentation and management of these important features. A measured survey would create a more detailed record of the earthworks, and would also record the extent of the damage to the barrows by 19th century excavation. The results of such a survey could be used to improve visitors understanding and appreciation of the site.

10.0: Acknowledgements

This report was written and researched by Derek Moscrop, and edited by Laurence Jones who also managed the project. The illustrations were prepared by Nigel Dodds and Bryony Ryder. Thanks are due to Jo McKintosh of the Environmental Planning Unit, Staffordshire County Council, and the to the staff of the Staffordshire Record Office, and the William Salt Library, in Stafford. The author would also like to thank Mike Salt of the Derbyshire Caving Association for his comments on the report.

11.0: References

Documentary Sources

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Robey, J.A. and Porter, L. 1971 The Metalliferous Mines of the Weaver Hills, Staffordshire. In *Bulletin of the Peak District Mines Historical Society*, Vol.4 Part 6, 417-428.

Porter, L. and Robey, J.A. 2000 *The Copper and Lead Mines around the Manifold Valley, North Staffordshire*. Landmark Publishing Ltd, Derbyshire.

SCC 2003 *Brief for Archaeological Survey and Assessment: Thorswood Nature Reserve*. Staffordshire County Council

Cartographic Sources

1775 A Map of the County of Stafford by William Yates

1805 Plan of the Lordship or Liberty of Stanton

1847 Stanton Tithe Map and Award

1881 1st Edition Ordnance Survey

1900 2nd Edition Ordnance Survey
1922 3rd Edition Ordnance Survey

Aerial Photographs (Verticals)

Staffordshire County Record Office

No. 4209 – July 1948

Mineshaft earthworks visible in Thorswood Plantation area.

Development Services Department, Staffordshire County Council

No. 9759 - July 1963 (Hunting Surveys)

Many mine shafts visible in area around Thorswood Plantation. Difficult to identify barrows easily amongst mining earthworks. Apart from these features no obvious archaeological features/cropmarks visible.

Nos. 133 71 073, 133 71 074, 133 71 094 and 133 71 195 - September 1971

Mine sites visible - resolution poor.

No. 54 81 097 – Winter vertical, 1981

Mine workings visible. Possible former stream channels visible in south-east corner of study area.

Nos. 12/50 92 233, 12/50 92 234, 13/34 92 038 – May 1992

Apart from mine pits no obvious archaeological features visible.

APPENDIX 1

1847 Tithe Map field names (Fig. 6)

Field

292 Plantation
293 Patch
294 Charlotte's Piece
295 Milner's Piece
296 Gleave Head
297 Little Gin Piece
298 House and Garden
299 House and Garden
300 Plantation
301 Lime Kiln Piece
302 Top Milners Piece
303 Black Ground
304 Black Ground
305 Loundes Piece
306 Gin Piece
307 Lower Loundes Piece
308 Field Above Barn
309 Barn Piece and Plantation
310 Wheat Piece
311 Rough Piece
312 Joseph's Piece
313 Broad Moor
314 Broad Moor
315 Broad Moor
316 Broad Moor
317 Slang
318 Thorswood Meadow
319 House and Garden
320 House and Garden
321 Thorswood House Piece
322 Thorswood House Piece
323 Gorsty Piece
324 Wood
325 Rough
326 Spring Piece

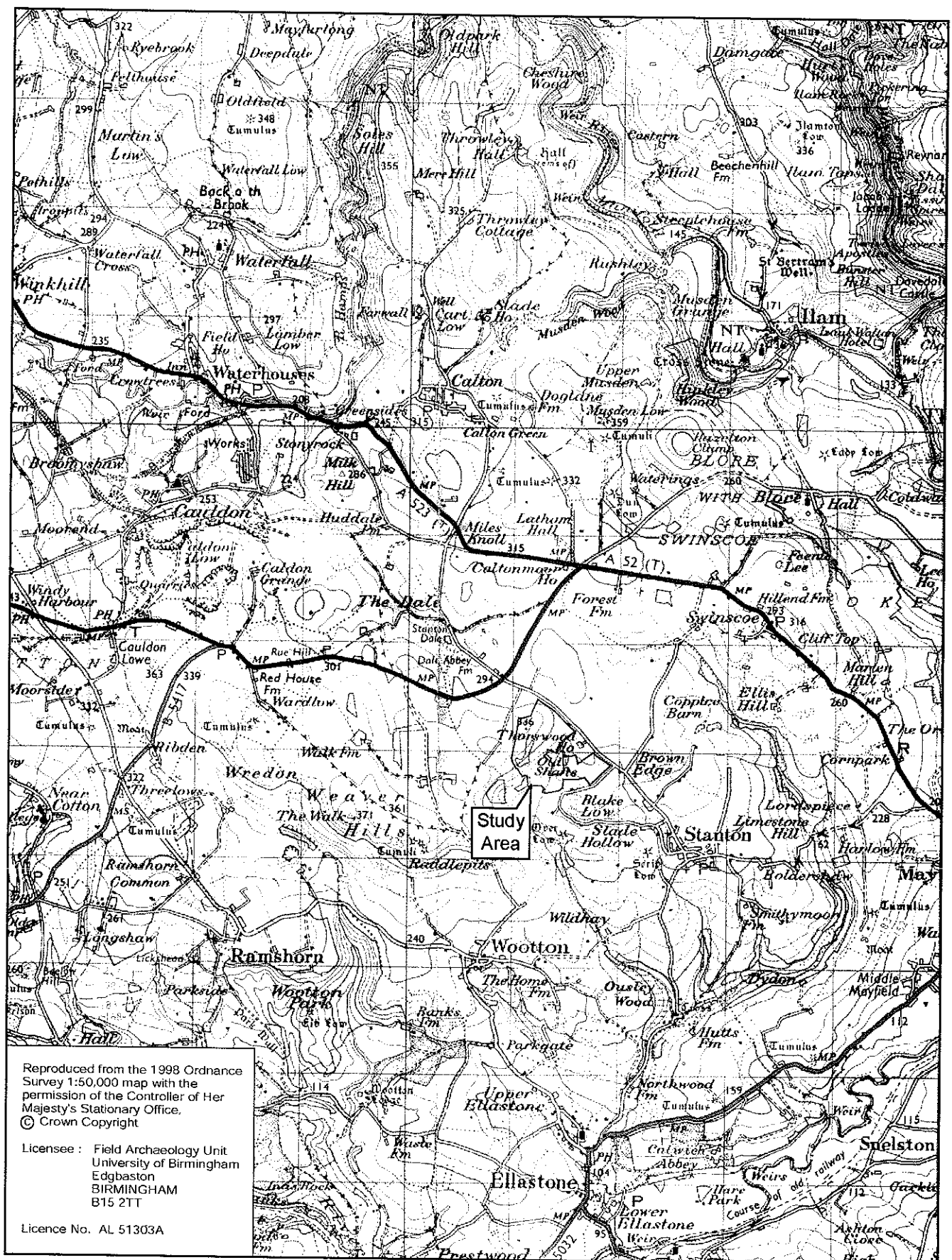


Fig.1

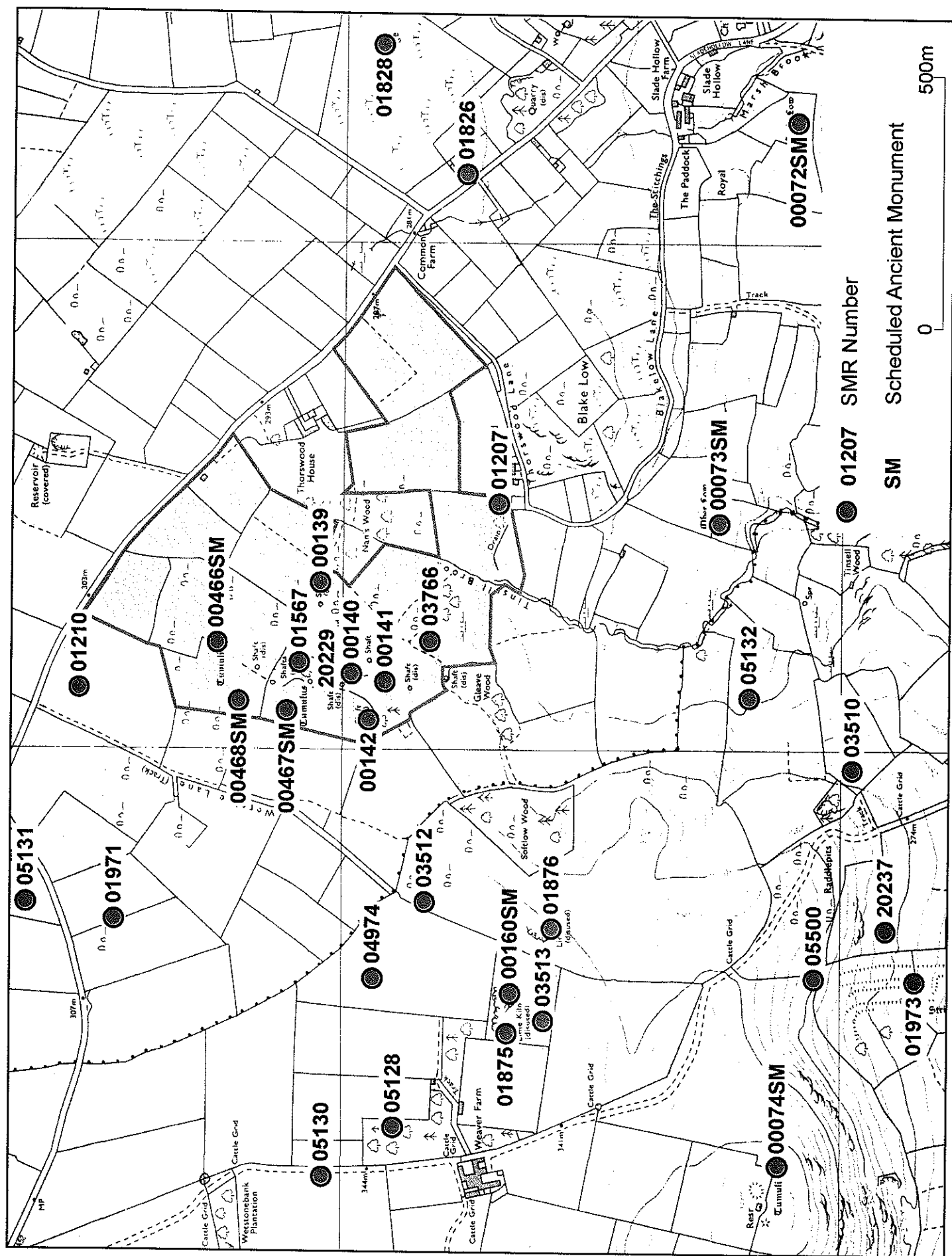


Fig. 2

Sections of Thorswood Mine

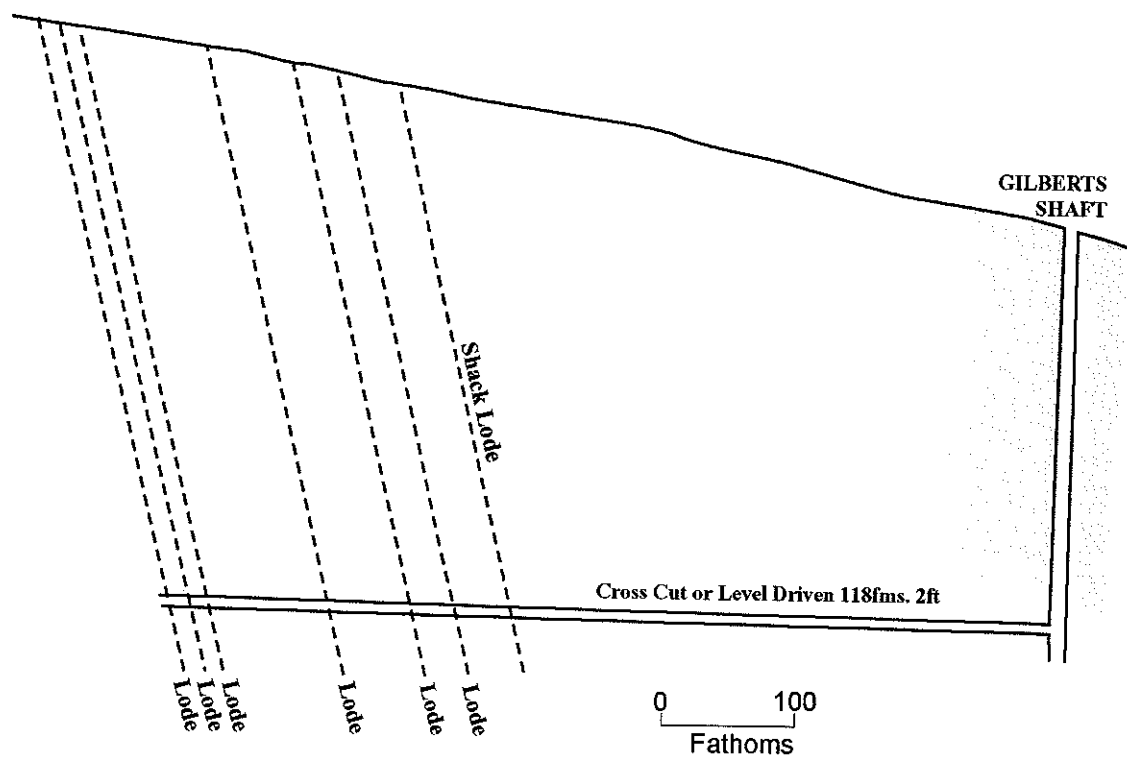
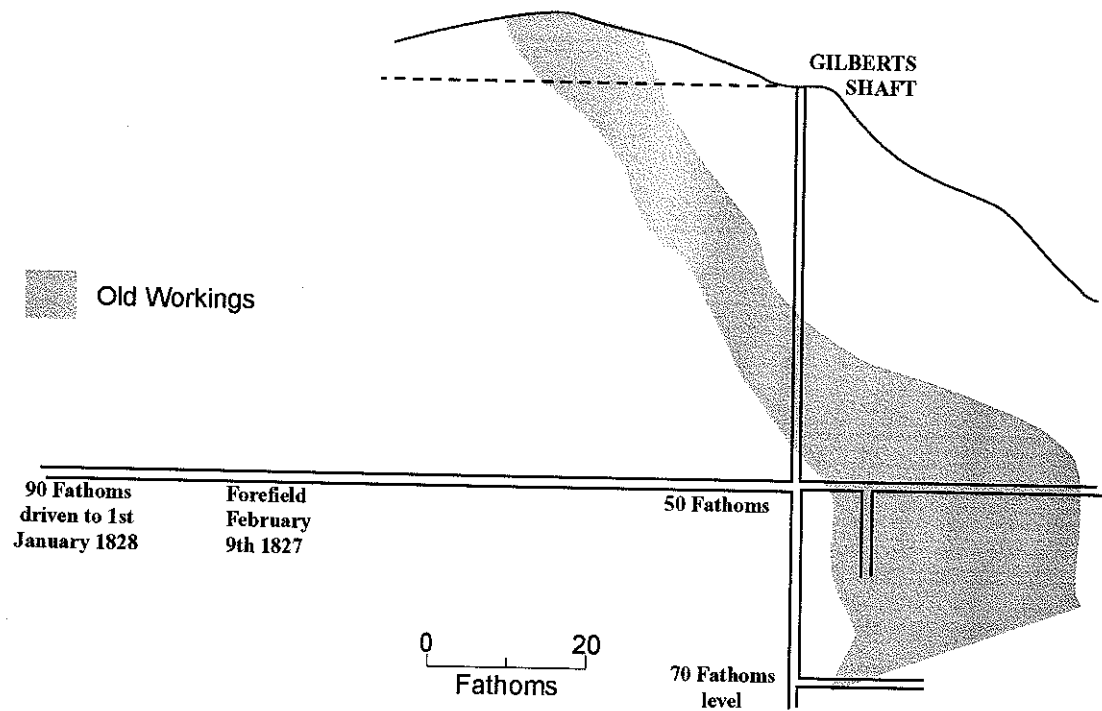


Fig.3

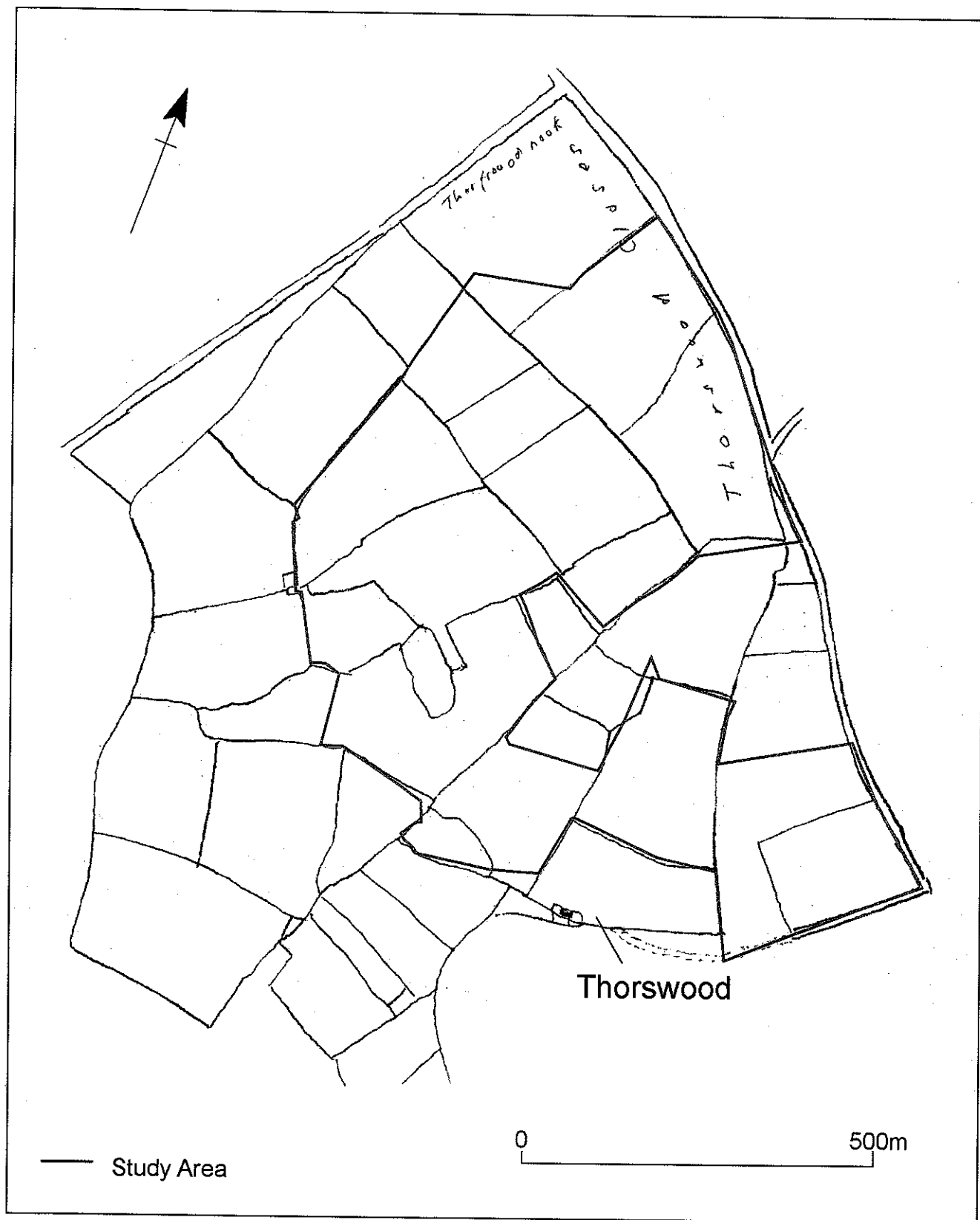


Fig.5 (1805)

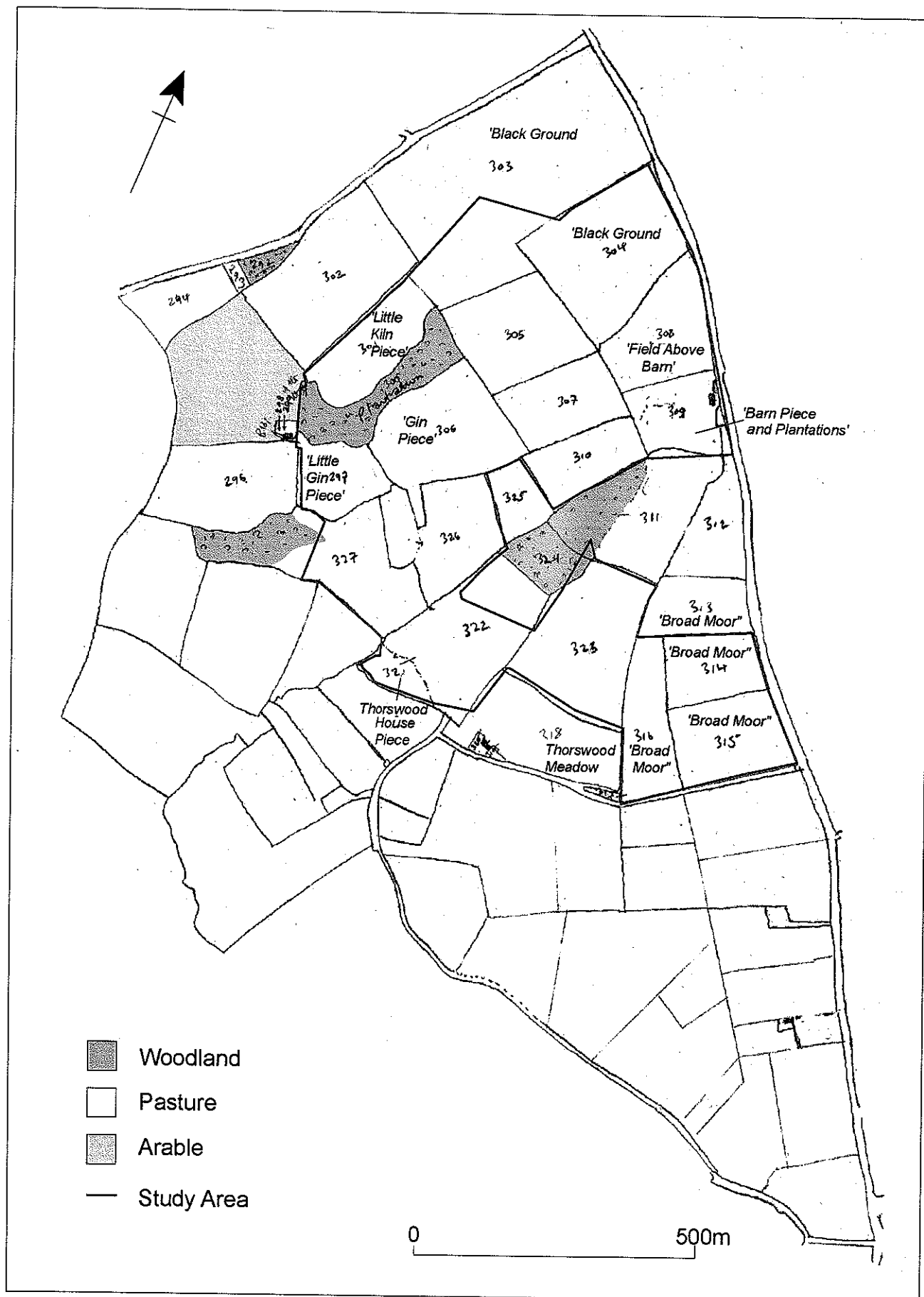


Fig.6 (1847 Tithe)

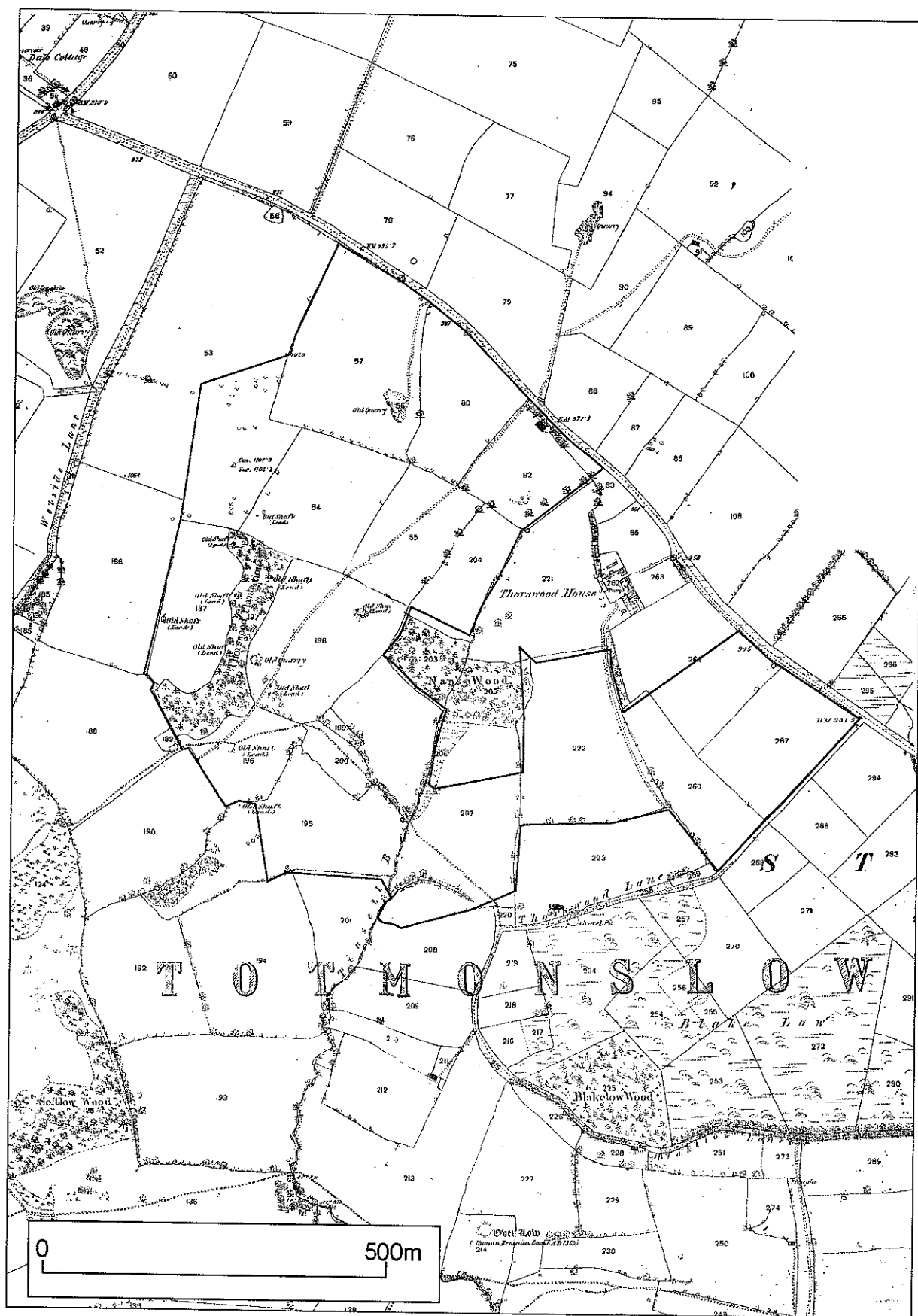


Fig.7 (1881)

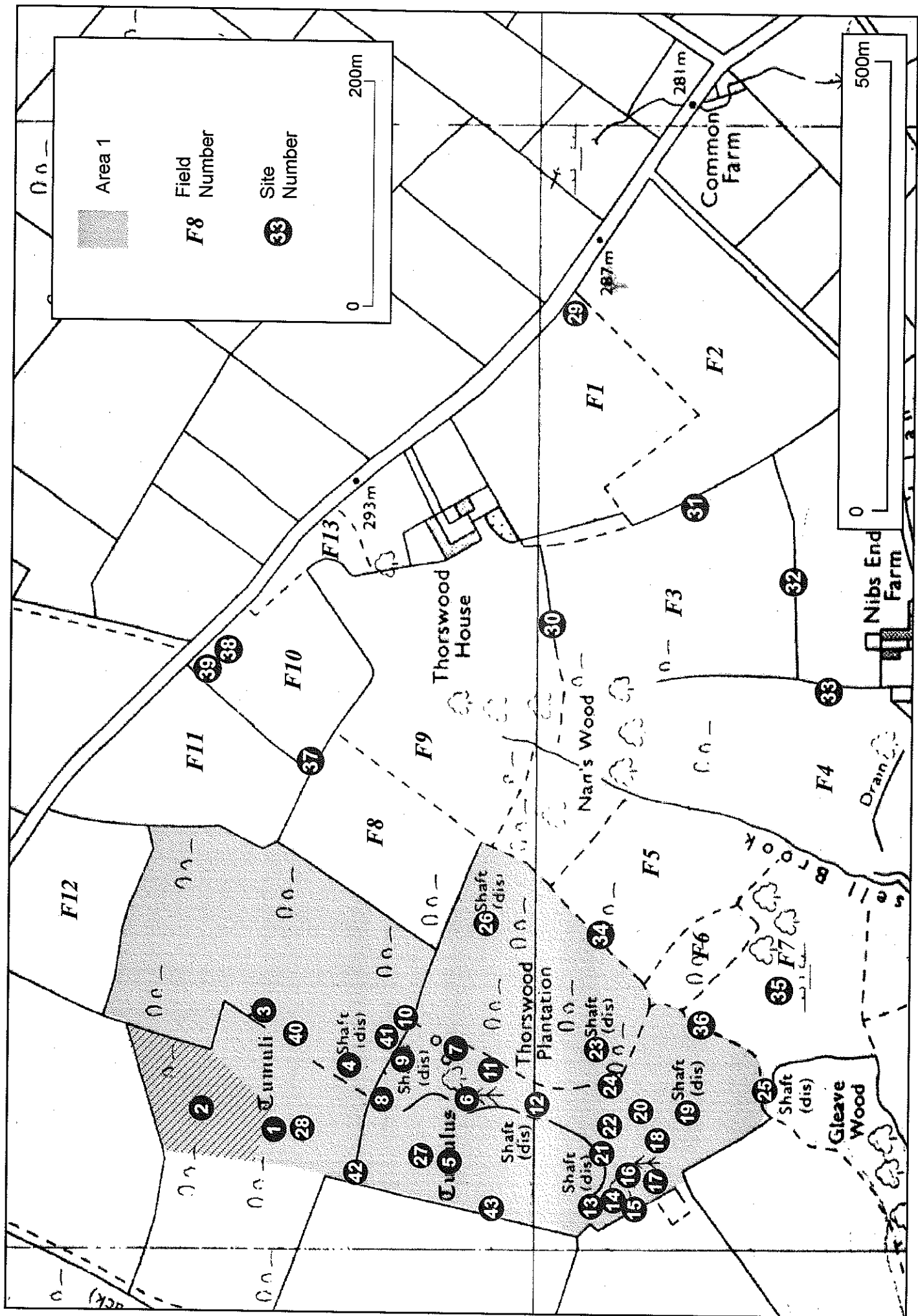


Fig.8

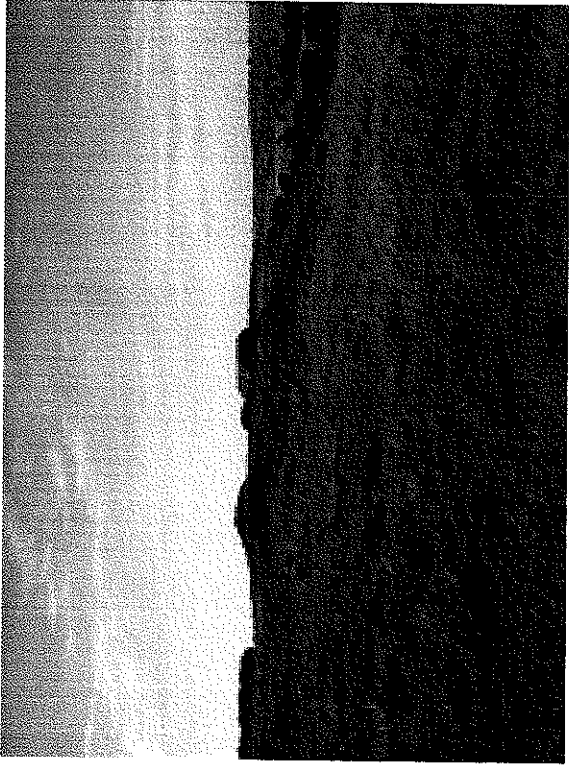


Plate 1



Plate 2



Plate 3



Plate 4



Plate 5

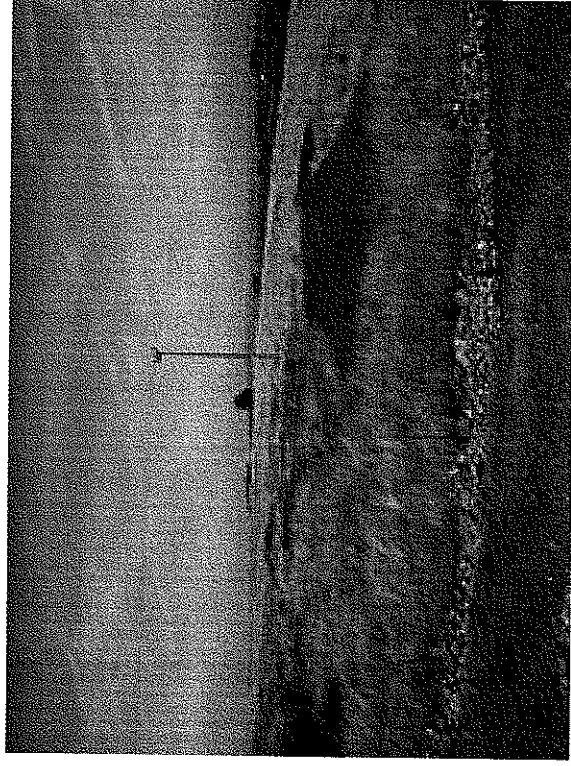


Plate 6



Plate 7



Plate 8



Plate 9



Plate 10



Plate 11



Plate 12



Plate 13



Plate 14



Plate 15



Plate 16



Plate 17



Plate 18



Plate 19



Plate 20



Plate 21

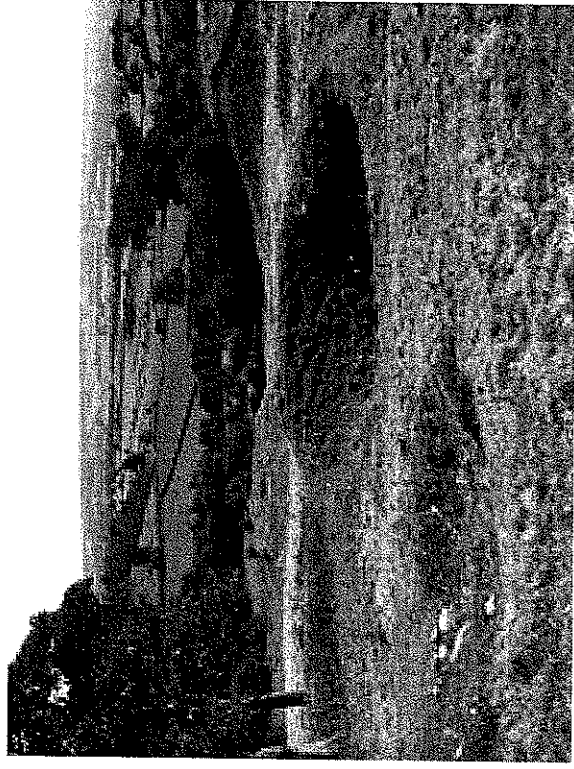


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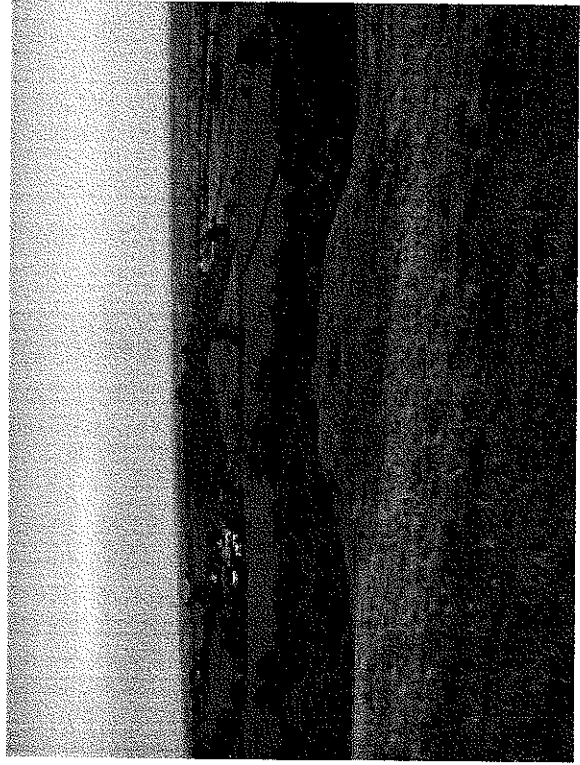


Plate 23



Plate 24



Plate 25



Plate 26

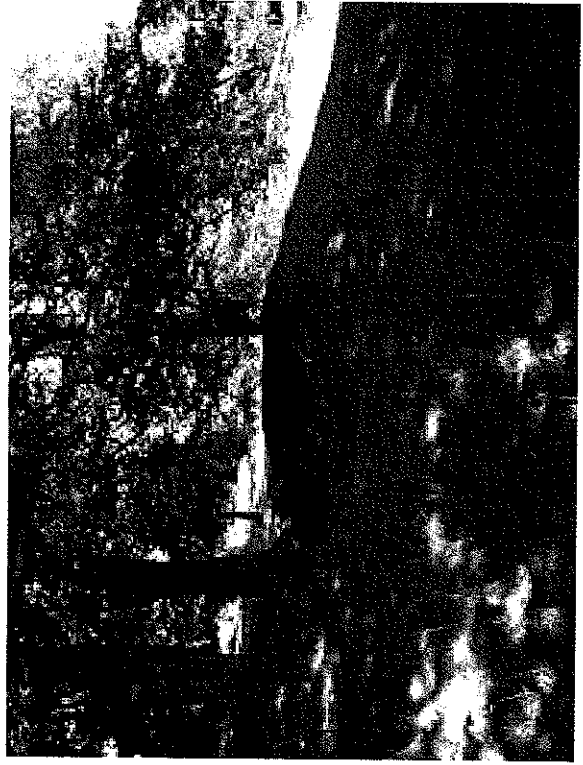


Plate 27

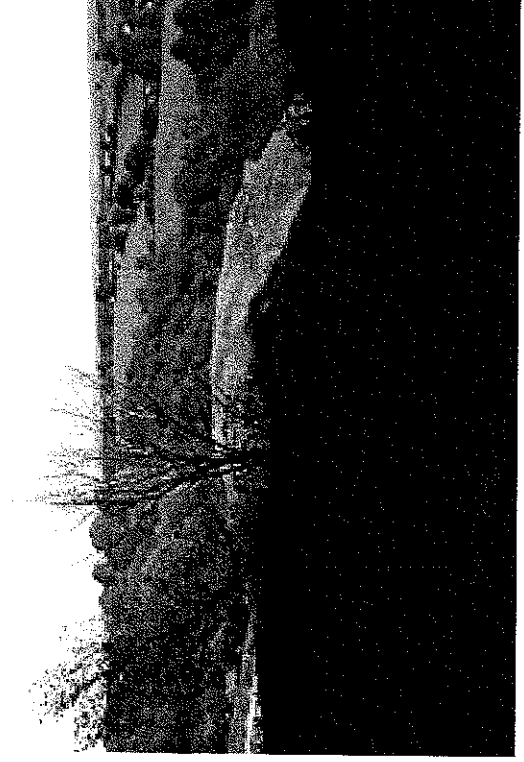


Plate 28



Plate 29



Plate 30

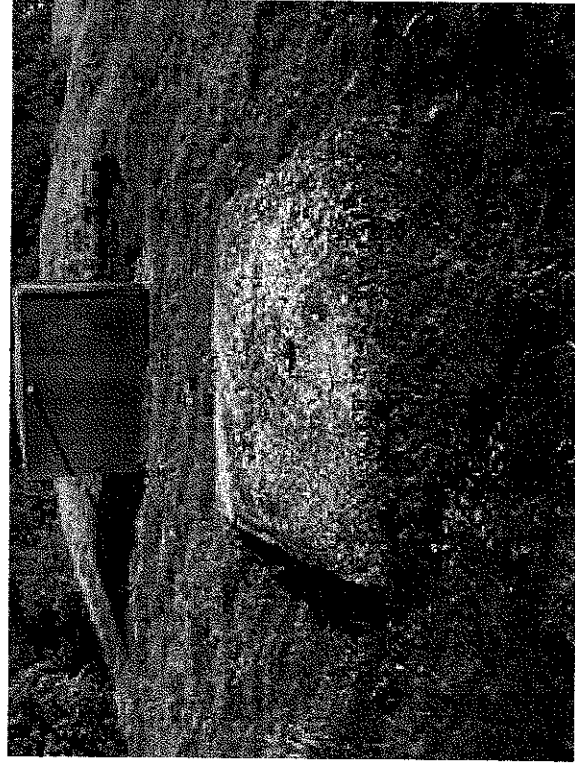


Plate 31



Plate 32

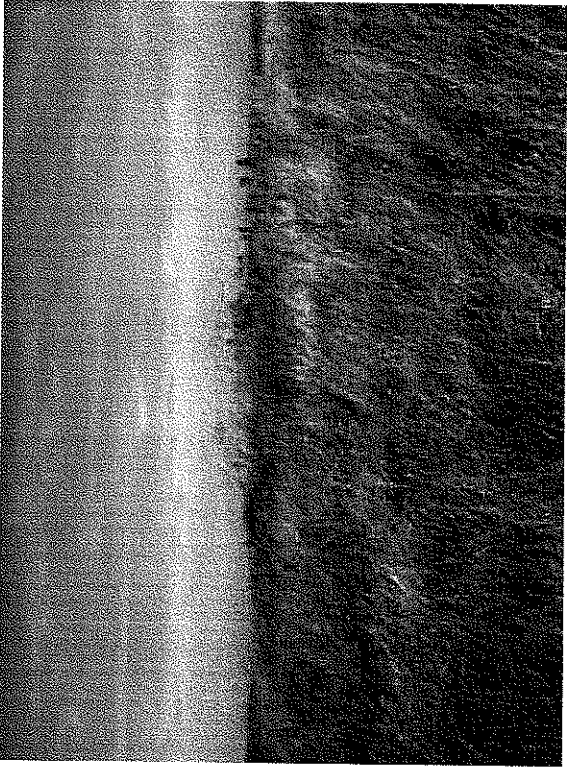


Plate 33



Plate 34

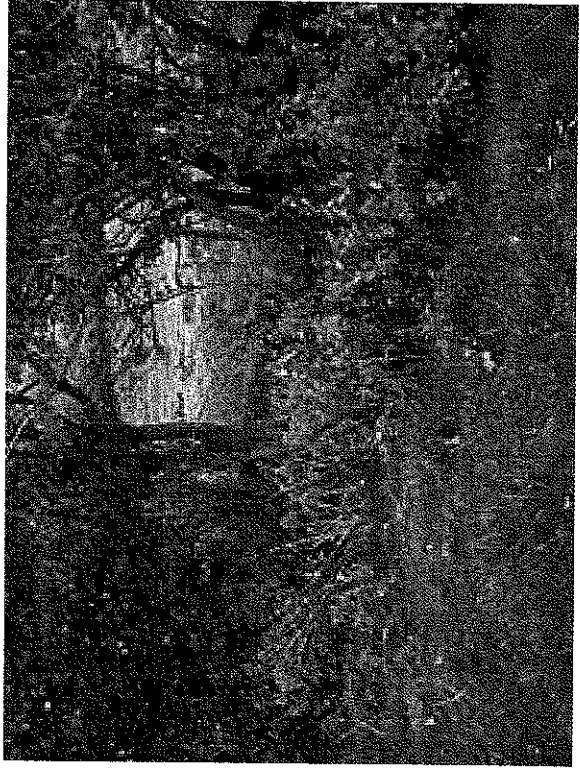


Plate 35



Plate 36

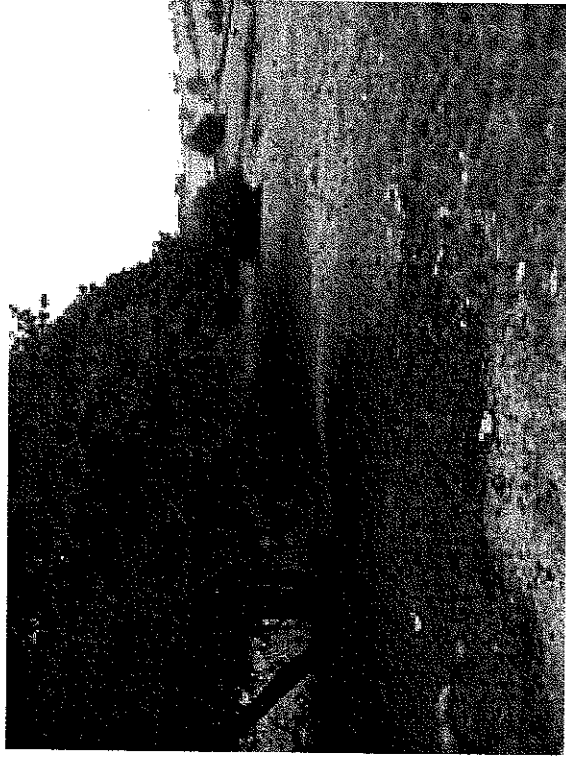


Plate 37



Plate 38



Plate 39



Plate 40



Plate 41



Plate 42



Photo. Mike Salt

Plate 43



Photo. Mike Salt

Plate 44



Photo. Mike Salt

Plate 45



Photo. Mike Salt

Plate 46